

## How arbitrary is language?

August 14 2014



Words in the English language are structured to help children learn according to research led by Lancaster University.

Words like "woof" accurately represent the sound of a dog while sounds with similar meanings may have a similar structure eg the "sl" sound at the beginning of a word often has negative properties as in "slime, slur, slum, slug".



An international team led by Professor Padraic Monaghan from the Department of Psychology at Lancaster University provides for the first time a comprehensive analysis of sound meaning structure using statistical techniques from biology and genetics.

The research, published in the *Philosophical Transactions of The Royal Society B*, shows that the structure of the vocabulary in English helps both children and adults.

He said: "Sounds relate to meaning for the words that children first encounter, addressing a critical question about how language is structured to aid learning.

"However, the later adult vocabulary is arbitrary, consistent with computational models of efficient language production and accurate language comprehension."

The debate about whether the sound of words contains information about meaning has continued for over 2,300 years.

This issue lies at the foundation of modern linguistics and psychology of language, which has been brought into stark relief by recent studies of sound symbolism where words actually sound like their meaning.

Sound symbolism has been suggested to be prevalent in language and necessary for <u>language</u> acquisition by <u>children</u>.

**More information:** How arbitrary is language? by Padraic Monaghan, Richard C Shillcock, Morten H Christiansen and Simon Kirby, <a href="mailto:rstb.royalsocietypublishing.or">rstb.royalsocietypublishing.or</a> ... .1098/rstb.2013.0299



## Provided by Lancaster University

Citation: How arbitrary is language? (2014, August 14) retrieved 9 April 2024 from <a href="https://phys.org/news/2014-08-arbitrary-language.html">https://phys.org/news/2014-08-arbitrary-language.html</a>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.